

SUPPORTING STATEMENT

Final Rule 30 CFR 57.5060, 57.5062, 57.5066, 57.5071, and 57.5075, - Health Standards for Diesel Particulates (Underground Metal and Nonmetal Mines)

A. Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

Under Section 101(a) of the Mine Safety and Health Act of 1977 (The Act), and Title 5, United States Code, Section 553, the Secretary of Labor shall develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal or other mines. This final rule contains information collection requirements for mine operators in §§ 57.5060, 57.5066, 57.5070, 57.5071, and 57.5075.

Section 57.5060(c)

Under this section the mine operator has five years after publication of the rule to limit the concentration of diesel particulate matter (dpm) to which miners are exposed in underground areas of a mine, where miners normally work or travel, to $160_{TC} \mu\text{g}/\text{m}^3$. If a mine has technological constraints in meeting this time requirement, then the mine can file a special extension application. Extension application must be posted and copy provided to miners' representative

Section 57.5060(d)

Under this section miners engaged in inspection, maintenance, or repair activities, and only in such activities, may, with the advance approval of the Secretary work in concentrations of dpm exceeding the applicable concentration limits in the rule. In order to do this the mine operator will need to write an Exemption Plan (EP) and a Respiratory Protection Plan (RPP), in order to allow miners to conduct the above activities while using respirators in areas of the mine where the dpm concentration limits of the rule is exceeded.

Under this section the EP and RPP plan must be mailed to MSHA and distributed to miners' representatives.

Under this section the mine operator will need to provide initial training to certain miners in the use of respirators.

Under this section the mine operator will provide fit testing to each miner that will use a respirator.

Under this section, the mine operator will need to register miners who are going to take respirator

training.

Under this section, the miners must sign a registration sheet proving that they have taken the respirator training.

Under this section, mine operators will conduct random checks, during a shift, to ensure that respirators are properly worn. The mine operator will then record the random checks.

Section 57.5066(c)

Under this section, the mine operator will need to take various steps to assure that the miner has taken the training concerning the maintenance of diesel powered equipment, such as prepare registration sheet, record persons taking training, and register miners who are being trained.

Section 57.5066(b)

This section requires that operators must tag diesel powered equipment at any time there is any apparent emission related defect in the equipment.

Each time that there is an emission related problem on a diesel powered machine and the machine is tagged there also must be a record made of the tag.

For each diesel machine that has been tagged an examination must be conducted concerning the tagged equipment and a record must be made of the examination.

Section 57.5070

Under this section all miners at a mine who can reasonably be expected to be exposed to diesel emissions on mine property must receive health training in accordance with §57.5070(a)(1) through (a)(4).

Registration sheets need to be prepared, and signed by miner receiving the training.

Section 57.5071

This section requires that mine operators sample the air four times a year to determine dpm concentrations. Additionally, mine operators must notify miners and their representatives of the dates and times the sampling will take place. (MSHA assumes that 45 percent of the time notification will occur orally, 35 percent of the time notification will be written, and 20 percent of the time notification will be posted.)

Also under this section, if a mine environment is above the dpm concentration limits mine operators will have to take corrective actions. The mine operators will have to post the corrective actions taken.

Diesel particulate samples will have to be taken by operators that choose to perform their own sampling.

Sampling results will be sent back to the operator. Under this section, when the operator receives the results the operator must post them and deliver them to the miner representative at the mine.

Section 57.5075

Under this section mine operator are required to provide miners or their representative records generated by the requirements of this rule, if requested.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The Mine Safety and Health Administration (MSHA) is promulgating regulations to decrease miner exposure to diesel particulate matter (dpm) in underground metal and nonmetal mining operations. Underground mines are confined spaces which, despite ventilation requirements, tend to accumulate significant concentrations of particles and gases -- both those produced by the mine itself (e.g., methane gas and coal dust) and those produced by equipment used in the mine (e.g., diesel particulate). It is widely recognized that respirable particles can create adverse health effects. While exposure of working miners to certain other respirable dusts is controlled (e.g., silica), there are no current restrictions on occupational exposure to diesel particulates. This information collection is used by MSHA to monitor the mine operators compliance.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

No specific information technology has been identified that would reduce the burden; however, in order to comply with the Government Paperwork Elimination Act the mine operator has the option of forwarding and/or retaining the information requested in whatever format method they choose, which may include utilizing, E-mail or Facsimile.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

No similar or duplicate information exists.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

The provisions of the Federal Mine Safety and Health Act of 1977 (Mine Act) and MSHA regulations

and standards apply to all operations because accidents, injuries and illnesses can occur at any mine regardless of size. Congress intended that the law be enforced at all mining operations regardless of size and that information collection and recordkeeping requirements be consistent with efficient and effective enforcement of the Act. S. Rep. 181, 95th Cong., 1st Sess. 28 (1977). However, Congress did recognize that small operations may face problems in complying with some of the provisions of the Mine Act. Section 103(e) of the Mine Act directs the Secretary of Labor not to impose an unreasonable burden on small businesses in obtaining any information under the Act. Accordingly, MSHA takes this into consideration when developing regulatory requirements, and when appropriate and consistent with ensuring the health and safety of this nation's miners, different requirements for small and large mines exist. See, for example, 30 CFR 49.3 and 50.11(b). To provide distinct information collection and recordkeeping requirements for small mines in the regulation at hand, however, would not promote the Act's objectives. This information collection does not have a significant impact on a substantial number of small entities

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

MSHA would not be able to verify the mine operators were complying with the regulations, therefore the possibility could exist that underground metal and nonmetal miners may be exposed to high concentration levels of diesel particulate matter.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- ! requiring respondents to report information to the agency more often than quarterly;
- ! requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- ! requiring respondents to submit more than an original and two copies of any document;
- ! requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;
- ! in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- ! requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- ! that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- ! requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

Although mine operators are required to post sampling results on the bulletin board and supply a copy to the miner representative, Sections 57.5062(c), and 57.5071(d) requires that this information be retained for five years. This collection of information is consistent with the guidelines in 5 C.F.R. § 1320.5.

8. If applicable, provide a copy and identify the data and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden. Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

MSHA published the proposed rule information collection requirements in the Federal Register on October 29, 1998, notifying the public that these information collection requirements were being reviewed in accordance with the Paperwork Reduction Act of 1995, and giving interested persons 60 days to submit comments. After further investigations by MSHA and as the result of public comments, MSHA published a notice in the Federal Register on June 30, 2000, (Vol. 65, No. 127, pages 40557 through 40559) reopened the proposed rule to permit comment on the revised proposed rule.

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

MSHA has decided not to provide payments or gifts to respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

There is no assurance of confidentiality provided to respondents.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

There are no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should:

- ! **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**

- ! **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.**

- ! **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.**

The purposed of this response to question 12 is to show the burden hours and related costs of the final rule that is borne by affected: (1) underground M/NM mine operators that use diesel powered equipment, and (2) M/NM miners.

Details Concerning Paperwork Burden Hours and Related Costs - For M/NM mine operators that use diesel powered equipment, most paperwork provisions concerns two types of burden hours. There are burden hours that will occur only in the first year the rule is in effect (hereafter known as, first year burden hours). There are burden hours that will occur every year that the rule is in effect, starting with the first year, (hereafter known as, annual burden hours).

There are a few cases where the paperwork provisions need further explanation. For section 57.5060(c) the burden hours and costs occur only in the fifth year after the rule takes effect.

There are a few paperwork provisions in section 57.5060(d) where burden hours and costs will be the same each year starting with the second year the rule is in effect, but whose first year burden hours and costs are different. MSHA transformed these first year burden hours and costs and annual burden hours and costs starting in Year 2 into adjusted first year burden hours and costs (first year burden hours and costs minus an amount equal to annual burden hours and costs starting with Year 2 after the rule takes effect) and true annual burden hours and costs starting in Year 1 after the rule takes effect.¹

Throughout this question the following hourly wage rates are used based upon data from the U.S. Metal

¹ A hypothetical example might help to explain this procedure. Suppose that burden costs are \$2,000 the first year and \$400 each year thereafter. The adjustment procedure simply splits first year burden costs into two parts: (1) \$400, for the first year of annual burden costs; and (2) the residual \$1,600. Consequently, adjusted first year burden costs would be \$1,600 and annual burden costs (starting in Year 1) would be \$400.

& Industrial Mineral Mine Salaries, Wages, & Benefits Survey Results

\$44.79 for a mine supervisor; \$19.42 for a miner;
\$17.57 for a clerical worker and; \$25 for a mine mechanic.

Summary of Paperwork Burden Hours and Related Costs

Table 1 shows that in the first year that the rule takes effect, M/NM mine operators will incur 6,047 burden hours, which is composed of 3,118 first year burden hours (from Table 2) and 2,929 annual burden hours (from Table 3). The related burden costs, in the first year, to mine operators will be \$223,982 (from Table 1), which is composed of \$136,413 of first year burden costs (from Table 2) and \$87,569 of annual burden costs (from Table 3).

For every year after the first year, with the exception of the fifth year, Table 1 shows that mine operators will incur 2,929 burden hours and related burden costs of \$87,569 (from Table 3).

Only in the fifth year in which the rule takes effect, will there be an increase in burden hours and cost above the fourth year. This is because there are burden hours and costs that only occur in the fifth year. Therefore, in the fifth year, Table 1 shows that M/NM mine operators will incur burden hours of 3,191, which is composed of 2,929 annual burden hours (from Table 3) and 263 fifth year burden hours (from Table 4). The related burden costs, in the fifth year, are \$99,152, of which \$87,569 is related to annual burden costs (from Table 3) and \$11,583 is related to fifth year burden costs (from Table 4).

Table 1: Summary of Burden Hours and Costs

	<20		20 to 500		>500		Total	
	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs
1st Only ^a	1,658	\$65,206	3,898	\$142,945	490	\$15,831	6,047	\$223,982
2nd thru 4th ^b	560	\$17,193	2,030	\$61,203	338	\$9,173	2,929	\$87,569
5th Only ^c	627	\$20,107	2,210	\$69,150	355	\$9,895	3,191	\$99,152
6th ^d	560	\$17,193	2,030	\$61,203	338	\$9,173	2,929	\$87,569

^a The 1st year = First Year burden hours and costs + Annual burden hours and costs.

^b The 2nd through 4th year = Annual burden hours.

^c The 5th year = Annual burden hours and costs + burden hours and costs that occur only in the 5th year.

^d Beginning in the 6th Year burden hours and costs are the same in each following year.

Table 2: Summary of Only First Year Burden Hours and Costs*

	<20		20 to 500		>500		Total	
	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs
57.5060(d)	1,048	\$46,361	1,698	\$75,069	106	\$4,692	2,852	\$126,121
57.5066(c)	28	\$678	45	\$1,052	4	\$85	77	\$1,816
57.5066(b)	22	\$974	126	\$5,621	42	\$1,881	189	\$8,477
Total	1,098	\$48,013	1,868	\$81,742	152	\$6,658	3,118	\$136,413

* Some of the first year costs in 57.5060(d) are adjusted first year costs.

Table 3: Summary of Annual Burden Hours and Costs That Begin in the First Year and Continue Every Year Thereafter

	<20		20 to 500		>500		Total	
	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs
57.5060(d)	251	\$10,074	772	\$32,459	48	\$2,029	1,071	\$44,561
57.5066(b)	61	\$1,448	145	\$3,412	38	\$894	244	\$5,753
57.5070	62	\$1,796	344	\$9,930	169	\$4,667	575	\$16,394
57.5071	179	\$3,751	713	\$14,402	50	\$1,008	942	\$19,161
57.5075	7	\$124	57	\$1,000	33	\$575	97	\$1,700
Total	560	\$17,193	2,030	\$61,203	338	\$9,173	2,929	\$87,569

Table 4: One-Time Burden Hours and Costs That Occur Only in the 5th Year

	<20		20 to 500		>500		Total	
	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs	Hrs.	Costs
57.5060(c)	67	\$2,913	180	\$7,947	16	\$722	263	\$11,583

Section 57.5060(c) - Supervisor Prepare Extension Application One-Time Burden Hours and costs Occurring in the Fifth Year

Five years after publication of the rule mine operators must limit the concentration of diesel particulate matter (dpm) to which miners are exposed in underground areas of a mine, where miners normally work or travel, to $160_{TC} (\mu\text{g}/\text{m}^3)$. If a mine has technological constraints in meeting this time requirement, then the mine can file a special extension application. MSHA estimates that the following mines will file for an extension application: 8 mines employing fewer than 20 workers; 11 mines employing 20 to 500 workers; and 1 mine employing more than 500 workers.

MSHA estimates that a supervisor will take 8 hours to write the application and a clerical worker will take 20 minutes (0.3333 hours) to prepare the applications, post the applications and provide a copy to the miners' representative. Table 5 shows one-time burden hours and costs for the mine supervisor to write the extension application. Table 6 shows one-time burden hours and costs for the clerical worker's time that is associated with preparing the extension application.

Since the one-time costs occur only in the fifth year after publication of the rule, they are multiplied by a discount factor of 0.71294 and an annualization factor of 0.07.

Table 5
Section 57.5060(c) - Supervisor Prepare Extension Application
One-Time Burden Hours and Costs Occurring in the Fifth Year

Mine Size (Emp.)	Number of Mines	Prepare Application per Mine (hrs.)	One Time Burden Hours	Superv. Wage (per hr.)	One Time Burden Cost	Discounted Annualized Burden Cost ^a
< 20	8	8	64	\$44.79	\$2,867	\$2,044
20 to 500	11	16	176	\$44.79	\$7,883	\$5,620
> 500	1	16	16	\$44.79	\$717	\$511
Total	20		256		\$11,466	\$8,175

^a Total Burden Costs x 0.71294 x 0.07, where 0.71294 is the discount factor and 0.07 is the annualization factor.

Table 6

**Section 57.5060(c) - Clerical Worker Preparation for Extension Application
One-Time Burden Hours and Costs Occurring in the Fifth Year**

Mine Size Emp.	Number of Mines	Prepare Application per Mine (hrs.)	One Time Burden Hours	Clerical Worker Wage (per hr.)	One Time Burden Costs	Discounted Annualized Burden Costs^a
< 20	8	0.333	2.667	\$17.57	\$47	\$33
20 to 500	11	0.333	3.667	\$17.57	\$64	\$46
> 500	1	0.333	0.333	\$17.57	\$6	\$4
Total	20		7		\$117	\$84

^a Total Burden Costs x 0.71294 x 0.07, where 0.71294 is the discount factor and 0.07 is the annualization factor.

Section 57.5060(d) - Supervisor Preparation for Initial Exemption Plan (EP) and Initial Respiratory Protection Plan (RPP) First Year and Annual Burden Hours and Costs

The supervisor will need to write an EP and a RPP plan, in order to allow miners to conduct inspection, maintenance, or repair activities in certain areas of the mine where the dpm concentration limit is exceeded. The mines affected by this provision will be: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mine employing more than 500 workers. In the first year, a supervisor will take 12 hours to prepare the EP and RPP plan. Annually, after the first year, it will take a supervisor 1 hour to revise such plans.

Table 7 shows first year burden hours and costs to write the EP and RPP plan, where 0.07 is used to annualized first year costs. Table 8, shows annual burden hours and costs to revise the EP and RPP plan.

Table 7
Section 57.5060(d) - Supervisor Preparation for Initial Exemption Plan (EP)
and Initial Respiratory Protection Plan (RPP)
First Year Burden Hours and Costs

Mine Size Emp.	Number of Mines	Prepare EP/RPP Plan per Mine (hrs.)	First Year Burden Hours	Superv. Wage (per hr.)	First Year Burden Cost	First Year Burden Cost Annualized ^a
< 20	77	12	924	\$44.79	\$41,386	\$2,897
20 to 500	112	12	1,344	\$44.79	\$60,198	\$4,214
> 500	7	12	84	\$44.79	\$3,762	\$263
Total	196		2,352		\$105,346	\$7,374

^a First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

Table 8
Section 57.5060(d) - Supervisor Revision of EP/RPP
and Initial Respiratory Protection Plan (RPP)
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Revise EP/RPP Plan per Mine (hrs.)	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	77	1	77	\$44.79	\$3,449
20 to 500	112	1	112	\$44.79	\$5,016
> 500	7	1	7	\$44.79	\$314
Total	196		196		\$8,779

**Section 57.5060(d) - Clerical Workers Distribution of EP and RPP Plan
Annual Burden Hours and Costs**

With respect to the initial EP and RPP plan, and annual revisions to such plans, MSHA estimates that a clerical worker will take 30 minutes (0.5 hours) to distribute the EP and RPP plan. This distribution includes copying and distributing the plan to miners' representative and copying and mailing the plan to MSHA. The affected mines are: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mines employing more than 500 workers.

Table 9, shows annual burden hours and costs to distribute the EP and RPP plan.

**Table 9
Section 57.5060(d) - Clerical Workers Distribution of EP/RPP Plan
Annual Burden Hours and Costs**

Mine Size Emp.	Number of Mines	Distribute EP/RPP Plan per Mine (hrs.)	Annual Burden Hours	Clerical Wage (per hr.)	Annual Burden Cost
< 20	77	0.5	39	\$17.57	\$676
20 to 500	112	0.5	56	\$17.57	\$984
> 500	7	0.5	4	\$17.57	\$61
Total	196		98		\$1,722

Section 57.5060(d) - Miner Respirator Initial Training and Briefing by Mine Supervisor Adjusted First Year and Annual Burden Hours and Costs

In the first year of the rule, MSHA estimates that a mine supervisor will take 45 minutes (0.75 hours) to provide initial training to certain miners in the use of respirators. A supervisor will need one training session, per mine, to provide respirator initial training. In addition, the first time respirator training is provided the supervisor will spend 5 minutes (0.0833 hours) of his time briefing a clerical worker concerning such training. The affected mines that will need to provide the one session training will be: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers, and 7 mines employing more than 500 workers.

For every year after the first year, as a result of employment turnover, a supervisor will need to provide one training session to train miners to use respirators. The training session is estimated to take 45 minutes (0.75 hours). No briefing of the clerical worker is necessary after the first year. In addition, annually, after the first year, the number of affected mines are the same with the exception that there will be only 26 mines employing fewer than 20 workers.²

Table 10 shows adjusted first year burden hours and costs concerning the supervisor's activities for initial respirator training. A discount factor of 0.07 is used to annualize the adjusted first year costs. Table 11 shows annual burden hours and costs concerning the supervisor's respirator training.

Table 10
Section 57.5060(d) - Miner Respirator Initial Training and
Briefing by Mine Supervisors
Adjusted First Year Burden Hours and Costs

Mine Size Employment	No. of Mines	Training and Record Keeping Hours ^a	First Year Burden Hours	Annual Burden Hours ^b	Adjusted First Year Burden Hours	Superv. Wage (per hr.)	Adjusted First Year Burden Cost	Adjusted First Year Burden Cost Annualized ^c
X < 20	77	0.833	64	19	45	\$44.79	\$2,012	\$141
20 ≤ X ≤ 500	112	0.833	93	84	9	\$44.79	\$418	\$29
X > 500	7	0.833	6	5	1	\$44.79	\$26	\$2
Total	196		163	109	55		\$2,456	\$172

^a 0.833 = 0.75 hours for training + 0.0833 for briefing clerical worker.

^b An equivalent amount of annual burden hours from Table VII-11.

^c First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

² Every year after the first year only 26 mines employing fewer than 20 workers are affected because the provision affects such mines every three years (77 mines divided by 3 years).

Table 11
Section 57.5060(d) - Miner Respirator Training
by Mine Supervisors
Annual Burden Hours and Costs

Mine Size Employment	Number of Mines	Training and Recordkeeping Hours	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
X < 20	26	0.75	19	\$44.79	\$862
20 ≤ X ≤ 500	112	0.75	84	\$44.79	\$3,762
X > 500	7	0.75	5	\$44.79	\$235
Total	145		109		\$4,860

Section 57.5060(d) - Clerical Workers Briefing by Mine Supervisor Regarding Respirator Training (First Year Burden Hours)

During the first year of the rule, for each affected mine, a clerical worker will need to spend 5 minutes (0.083 hours) being briefed by a supervisor concerning respirator training. The mines affected by this provision are: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mines employing more than 500 workers.

Table 12 shows first year burden hours and costs associated with the clerical workers' time associated with being briefed by a supervisor concerning respirator training.

Table 12
Section 57.5060(d) - Clerical Workers Briefing
by Mine Supervisors Regarding Training
First Year Hours and Costs

Mine Size Emp.	Number of Mines	Briefing (hours)	First Year Burden Hours	Clerical Wage (per hr.)	Burden Cost
< 20	77	0.083	6	\$17.57	\$113
20 to 500	112	0.083	9	\$17.57	\$164
> 500	7	0.083	1	\$17.57	\$10
Total	196		16		\$287

**Section 57.5060(d) - Miner Respirator Initial Fit Testing by Mine Supervisor
(First Year and Annual Burden Hours and Costs)**

During the first year of the rule, a supervisor will provide fit testing to each miner that will use a respirator. The mines where fit testing will be provided will be: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mines employing more than 500 workers. In the first year of the rule, 3 miners will be tested in mines employing fewer than 20 workers, while 11 miners will be tested in mines employing 20 or more workers. It is estimated to take 15 minutes (0.25 hours) to fit test each affected miner.

As a result of miner turnover, every year after the first year, 1 miner will be tested in each mine size category. The number of mines and the time to perform fit testing is the same as in the first year.

Table 13 shows first year burden hours and costs related to fit testing. Table 14 shows annual burden hours and costs related to fit testing.

**Table 13
Section 57.5060(d) - Miner Respirator Initial Fit Testing
by Mine Supervisors
First Year Burden Hours and Costs**

Mine Size Employment	No. of Mines	Number of Fit Tests per Mine	Time to Fit Test Hours	First Year Burden Hours	Superv. Wage (per hr.)	First Year Burden Cost	First Year Burden Cost Annualized^a
X < 20	77	3	0.25	58	\$44.79	\$2,587	\$181
20 ≤ X ≤ 500	112	11	0.25	308	\$44.79	\$13,795	\$966
X > 500	7	11	0.25	19	\$44.79	\$862	\$60
Total	196			385		\$17,244	\$1,207

^a First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

Table 14
Section 57.5060(d) - Miner Respirator Fit Testing
by Mine Supervisors
Annual Burden Hours and Costs

Mine Size Employment	Number of Mines	Number of Fit Tests per Mine	Time to Fit Test Hours	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
X < 20	77	1	0.25	19	\$44.79	\$862
20 ≤ X ≤ 500	112	1	0.25	28	\$44.79	\$1,254
X > 500	7	1	0.25	2	\$44.79	\$78
Total	196			49		\$2,195

Section 57.5060(d) - Clerical Workers Preparation of Registration Sheet for Trainees Adjusted First Year Burden Hours and Costs

The clerical worker will need to register miners who are going to take respirator training. In the first year of the rule, the mines affected mines are: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mines employing more than 500 workers. For each mine, the clerical person will need 10 minutes (0.167 hours) to prepare a registration sheet for the miners receiving respirator training. In addition, 1 minute (0.0167 hours) will be needed to log in each trainee's name. In the first year of the rule the miners that will need to be registered are 4 miners in mines employing fewer than 20 workers, and 12 miners in mines employing 20 or more workers.

Annually, after the first year, only 1 miner will need to be registered in each mine size category. It will still take the clerical worker 10 minutes (0.167 hours) to prepare a registration sheet. In addition, annually, after the first year, the number of affected mines are the same with the exception that there will be only 26 mines employing fewer than 20 workers.³

Table 15 shows adjusted first year burden hours and costs for the clerical worker to prepare for respirator training. Table 16 shows annual burden hours and costs for the clerical worker to prepare for respirator training.

Table 15
Section 57.5060(d) - Clerical Workers Preparation of
Registration Sheet for Trainees
Adjusted First Year Burden Hours and Costs

Mine Size Employment	No. of Mines	Prepare Reg. Sheet (hours) ^a	First Year Burden Hours	Annual Burden Hours ^b	Adjusted First Year Burden Hours	Clerical Wage (per hr.)	Adjusted First Year Burden Cost	Adjusted First Year Burden Cost Annualized ^c
X < 20	77	0.233	18	5	13	\$17.57	\$233	\$16
20 ≤ X ≤ 500	112	0.367	41	21	21	\$17.57	\$361	\$25
X > 500	7	0.367	3	1	1	\$17.57	\$23	\$2
Total	196		62	27	35		\$616	\$43

^a = 0.167 (to prepare registration sheet per mine) + 0.0167 (to enter each trainee's name). Training involves 4 miners in mines employing fewer than 20 workers and 12 miners in larger mines.

^b An equivalent amount of annual burden hours from Table VII-16.

^c First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

³ Every year after the first year only 26 mines employing fewer than 20 workers are affected because the provision affects such mines every three years (77 mines divided by 3 years).

Table 16
Section 57.5060(d) - Clerical Workers Preparation of
Registration Sheet for Trainees
Annual Burden Hours and Costs

Mine Size	Number	Number	Prepare	Annual	Clerical	Annual
Emp.	of Mines	of	Registration	Burden	Wage	Burden
		Trainees	Sheet	Hours	(per hr.)	Cost
			(hours)^a			
< 20	26	1	0.183	5	\$17.57	\$83
20 to 500	112	1	0.183	21	\$17.57	\$361
> 500	7	1	0.183	1	\$17.57	\$23
Total	145			27		\$466

^a 0.813 = 0.167 (to prepare registration sheet per mine)
+ 0.0167 (to enter each trainee's name)

Section 57.5060(d) - Miners Sign Registration Sheet (Adjusted First Year and Annual Burden Hours and Costs)

The miners must sign a registration sheet proving that they have taken the respirator training. In the first year, the number of mines affected are: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers, and 7 mines employing more than 500 workers. MSHA estimates that it will take 20 seconds (0.006 hours) to sign the registration sheet. In the first year, the number of miners to sign will be 4 miners in mines employing fewer than 20 workers; and 12 miners in mines employing 20 or more workers.

Annually, every year after the first year, the number of miners to sign will be 1 miner in each mine size category. In addition, annually, after the first year, the number of affected mines are the same with the exception that there will be only 26 mines employing fewer than 20 workers.⁴

Table 17 shows adjusted first year burden hours and costs for miners to sign the training registration sheet. Table 18 shows annual burden hours and costs for miners to sign the training registration sheet.

Table 17
Section 57.5060(d) - Miners Sign Registration Sheet
Adjusted First Year Burden Hours and Costs

Mine Size Emp.	No. of Mines	No. of Miners	Sign Reg. Sheet (hrs.)	First Year Burden Hours	Annual Burden Hours ^a	Adjusted First Year Burden Hours	Miner Wage per Hour	Adjusted First Year Burden Cost	Adjusted First Year Burden Cost Annualized ^b
< 20	77	4	0.006	2	0	2	\$19.42	\$30	2
20 to 500	112	12	0.006	7	1	7	\$19.42	\$133	9
> 500	7	12	0.006	0	0	0	\$19.42	\$8	1
Total	196			10	1	9		\$172	12

^a An equivalent amount of annual burden hours from Table VII-18.

^b First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

⁴ Every year after the first year only 26 mines employing fewer than 20 workers are affected because the provision affects such mines every three years (77 mines divided by 3 years).

Table 18
Section 57.5060(d) - Miners Sign Registration Sheet
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Number of Miners	Sign Registration Sheet (hours)^a	Annual Burden Hours	Miner Wage (per hr.)	Annual Burden Cost
< 20	26	1	0.006	0	\$19.42	\$3
20 to 500	112	1	0.006	1	\$19.42	\$12
> 500	7	1	0.006	0	\$19.42	\$1
Total	145			1		\$16

**Section 57.5060(d) - Supervisor Random Inspection of Respirators and Recordkeeping
(Annual Burden Hours)**

Annually, supervisors will make random checks, during a shift, to ensure that respirators are properly worn. The supervisor will then record the random checks. The number of mines affected are: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers, and 7 mines employing more than 500 workers. For each random inspection, MSHA estimates that the supervisor will spend 1.5 minutes making the inspection and another 1.5 minutes to record the inspection, for a total of 3 minutes (0.05 hours). In addition, for each mine, it is estimated that 2 random inspections per month (24 per year) will occur in mines employing fewer than 20 workers, and 7 random inspections per month (84 per year) will occur in mines employing 20 or more workers.

Table 19 shows annual burden hours and costs to make random inspections of respirators.

Table 19
Section 57.5060(d) Supervisor Random Inspection
of Respirators and Recordkeeping
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Inspections per Mine per Year	Inspection and Record Keeping (hours)^a	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	77	24	0.050	92	\$44.79	\$4,139
20 to 500	112	84	0.050	470	\$44.79	\$21,069
> 500	7	84	0.050	29	\$44.79	\$1,317
Total	196			592		\$26,525

^a 0.50 = 0.25 (to inspect respirators) +0.25 (to log date of inspection)

**Section 57.5066(c) - Supervisor Brief Clerical Workers Regarding Maintenance Training
(First Year Burden Hours and Costs)**

A supervisor will need to brief a clerical worker concerning the preparation of the maintenance training. The mines affected will be: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mines employing more than 500 workers. It will take the supervisor 5 minutes (0.083 hours) to brief the clerical worker.

Table 20 shows first year burden hours and costs for the supervisor to brief the clerical worker concerning maintenance training.

Table 20
57.5066 (c) Mine Supervisors Brief Clerical Workers
Regarding Maintenance Training
First Year Burden Hours and Costs

Mine Size	Number of Mines	Briefing (hours)	First Year Burden Hours	Superv. Wage (per hr.)	First Year Burden Cost	First Year Burden Cost Annualized^a
X < 20	77	0.083	6	\$44.79	\$287	\$20
20 ≤ X ≤ 500	112	0.083	9	\$44.79	\$418	\$29
X > 500	7	0.083	1	\$44.79	\$26	\$2
Total	196		16		\$732	\$51

^a First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

**Section 57.5066(c) - Clerical Worker Briefing and Preparing Registration Sheet
(First Year Burden Hours and Costs)**

After being briefed by the supervisor the clerical worker will need to prepare the registration sheet. The number of mines affected are: 77 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mines employing more than 500 workers. MSHA estimates that the clerical worker will spend 5 minutes being briefed by the supervisor and another 10 minutes preparing the registration sheet, for a total of 15 minutes (0.25 hours).

Table 21 shows first year burden hours and costs for the clerical worker to be briefed and prepare registration sheet for maintenance training.

Table 21
57.5066 (c) Clerical Workers Briefing and
Preparing Registration Sheet
First Year Burden Hours and Costs

Mine Size	Number of Mines	Briefing and Preparing (hours)^a	First Year Burden Hours	Clerical Worker Wage (per hr.)	First Year Burden Cost	First Year Burden Cost Annualized^b
X < 20	77	0.25	19	\$17.57	\$338	\$24
20 ≤ X ≤ 500	112	0.25	28	\$17.57	\$492	\$34
X > 500	7	0.25	2	\$17.57	\$31	\$2
Total	196		49		\$861	\$60

^a 0.25 = 0.083 (for briefing) + 0.167 (to prepare registration sheet)

^b First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

**Section 57.5066(c) - Clerical Workers Entering Names of Trainees in Computer
(First Year Burden Hours and Costs)**

It will take a clerical worker 1 minute (0.017 hours) to enter the name of each trainee in the computer. The number of miners to receive maintenance training in each mine size category are: 121 miners in mines employing fewer than 20 workers, 330 miners in mines employing 20 to 500 workers, and 66 miners in mines employing more than 500 workers.

Table 22 shows first year burden hours and costs for the clerical worker to enter names of trainees in the computer.

Table 22
57.5066 (c) Clerical Workers Entering Names of
Trainees in Computer
First Year Burden Hours and Costs

Mine Size	Number of Trainees	Entering Name (hours)	First Year Burden Hours	Clerical Worker Wage (per hr.)	First Year Burden Cost	First Year Burden Cost Annualized^a
X < 20	121	0.017	2	\$17.57	\$35	\$2
20 ≤ X ≤ 500	330	0.017	6	\$17.57	\$97	\$7
X > 500	66	0.017	1	\$17.57	\$19	\$1
Total	517		9		\$151	\$11

^a First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

Section 57.5066(c) - Miner Sign Registration Sheet (First Year Burden Hours and Costs)

The miner who is receiving training must sign a registration sheet which can be used as proof that the miner has taken the training concerning maintenance of diesel powered equipment. The number of miners to receive maintenance training in each mine size category are: 121 miners in mines employing fewer than 20 workers, 330 miners in mines employing 20 to 500 workers, and 66 miners in mines employing more than 500 workers. For each miner, MSHA estimates that it will take 20 seconds (0.006 hours) to sign the registration sheet.

Table 23 shows first year burden hours and costs for miners to sign the registration sheet concerning maintenance training of diesel powered equipment.

Table 23
57.5066 (c) Miners Sign Registration Sheet
First Year Burden Hours and Costs

Mine Size	Number of Trainees	Signing Registration Sheet (hours)	First Year Burden Hours	Mechanic Wage (per hr.)	First Year Burden Cost	First Year Burden Cost Annualized^a
X < 20	121	0.006	1	\$25.00	\$17	\$1
20 ≤ X < 500	330	0.006	2	\$25.00	\$46	\$3
X > 500	66	0.006	0	\$25.00	\$9	\$1
Total	517		3		\$72	\$5

^a First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

Section 57.5066(b) - Training of Miners by Mine Supervisor Regarding Tagging Procedures (First Year Burden Hours and Costs)

Section 57.5066(b) requires that operators must tag diesel powered equipment at any time there is any apparent emission related defect in the equipment. In order for machine operator to be able to tag the equipment they will first need to receive training as to what problems will result in tagging the equipment. A mine supervisor will provide the training. It is estimated to take the mine supervisor 15 minutes (0.25 hours) for each training session. The number of estimated training sessions are: 87 in mines employing fewer than 20 workers, 502 in mines employing 20 to 500 workers, and 168 in mines employing more than 500 workers.

Table 24 shows first year burden hours and costs for the supervisor to hold training sessions related to tagging defected diesel powered equipment.

Table 24
57.5066 (b) Training of Miners by Mine Supervisor
Regarding Tagging Procedure
First Year Burden Hours and Costs

Mine Size	Number of Training Sessions	Training (hours)	First Year Burden Hours	Superv. Wage (per hr.)	First Year Burden Cost	First Year Burden Cost Annualized^a
X < 20	87	0.25	22	\$44.79	\$974	\$68
20 ≤ X ≤ 500	502	0.25	126	\$44.79	\$5,621	\$393
X > 500	168	0.25	42	\$44.79	\$1,881	\$132
Total	757		189		\$8,477	\$593

^a First Year Burden Cost x 0.07, where 0.07 is the annualization rate.

Section 57.5066(b) - Miner Tag Diesel Equipment and Record Tag (Annual Burden Hours and Costs)

Each time there is an emission related problem on a diesel powered machine the equipment must be tagged, and a record is made of the tag. Annually, MSHA estimates that, on average, in mines with fewer than 20 workers 40 percent of diesel powered equipment (230 machines) will be tagged. For larger mines, which generally have more extensive preventive maintenance programs, MSHA estimates that annually, on average, 20 percent of the diesel powered equipment will be tagged. Therefore, the number of diesel machines to be tagged annually will be 542 machines in mines employing 20 to 500 workers, and 142 machines in mines employing more than 500 workers. It is estimated to take 2 minutes to tag the machine and another 2 minutes to record the tagging, for a total of 4 minutes (0.067 hours).

Table VII-25 shows annual burden hours to tag diesel powered equipment concerning emission related problems.

Table 25
Section 57.5066 (b) Miners Tag Diesel Equipment
and Record Tag
Annual Burden Hours and Costs

Mine Size Emp.	Number of Tags	Tag and Record (hrs.)^a	Annual Burden Hours	Miner Wage (per hr.)	Annual Burden Cost
< 20	230	0.067	15	\$19.42	\$298
20 to 500	542	0.067	36	\$19.42	\$702
> 500	142	0.067	9	\$19.42	\$184
Total	914		61		\$1,183

^a 0.067 = 0.0333 (to tag the equipment) + 0.0333 (to record the tag)

Section 57.5066(b) - Examine Tagged Diesel Equipment and Record Examination (Annual Burden Hours and Costs)

For each diesel machine that has been tagged an examination must be conducted concerning the tagged equipment and a record must be made of the examination. As noted earlier, the number of machines to be tagged annually will be: 230 machines in mines employing fewer than 20 workers, 542 machines in mines employing 20 to 500 workers, and 142 machines in mines employing more than 500 workers. For each piece of equipment tagged, MSHA estimates that it will take 10 minutes to examine the machine and another 2 minutes to record the examination, for a total of 12 minutes (0.2 hours).

Table 26 shows annual burden hours and costs to examine tagged equipment and record the examination.

Table 26
Section 57.5066 (b) Examine Tagged
Diesel Equipment and Record Examination
Annual Burden Hours and Costs

Mine Size Emp.	Number of Tags	Examine and Record (hrs.)^a	Annual Burden Hours	Mechanic Wage (per hr.)	Annual Burden Cost
< 20	230	0.20	46	\$25.00	\$1,150
20 to 500	542	0.20	108	\$25.00	\$2,710
> 500	142	0.20	28	\$25.00	\$710
Total	914		183		\$4,570

^a 0.20 = 0.167 (to examine the equipment) + 0.033 (to record the examination)

**Section 57.5070 - Mine Supervisor Briefing Clerical Worker Regarding Health Training
(Annual Burden Hours and Costs)**

All miners at a mine who can reasonably be expected to be exposed to diesel emission on mine property must receive health training in accordance with section 57.5070(a)(1) through (a)(4). For each mine, MSHA estimates that it will take a mine supervisor 5 minutes (0.083 hours) to brief a clerical worker concerning such training. The number of mines affected by this provision will be: 77 mines employing fewer than 20 workers, 112 mines employing 20 to 500 workers, and 7 mines employing more than 500 workers.

Table 27 shows annual burden hours and costs for a supervisor to brief a clerical worker concerning miner health training.

Table 27
Section 57.5070 Mine Supervisors Brief Clerical
Workers Regarding Health Training
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Briefing (hrs.)	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	77	0.083	6	\$44.79	\$287
20 to 500	112	0.083	9	\$44.79	\$418
> 500	7	0.083	1	\$44.79	\$26
Total	196		16		\$732

**Section 57.5070 - Clerical Worker Briefed by Mine Supervisor Regarding Health Training
(Annual Burden Hours and Costs)**

As noted earlier, all miners at a mine who can reasonably be expected to be exposed to diesel emission on mine property must receive health training in accordance with section 57.5070(a)(1) through (a)(4). For each mine, MSHA estimates that it will take a clerical worker 5 minutes (0.083 hours) to be briefed by a supervisor concerning such training. The number of mines affected by this provision will be: 77 mines employing fewer than 20 workers, 112 mines employing 20 to 500 workers, and 7 mines employing more than 500 workers.

Table 28 shows annual burden hours and costs for a clerical worker to be briefed by a supervisor concerning miner health training.

Table 28
Section 57.5070 Clerical Workers are Briefed by Mine
Supervisors Regarding Health Training
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Briefing (hrs.)	Annual Burden Hours	Clerical Worker Wage (per hr.)	Annual Burden Cost
< 20	77	0.083	6	\$17.57	\$113
20 to 500	112	0.083	9	\$17.57	\$164
> 500	7	0.083	1	\$17.57	\$10
Total	196		16		\$287

**Section 57.5070 - Mine Supervisor Perform Health Training Sessions
Annual Burden Hours**

Concerning miner health training, the supervisor will hold a 15 minute (0.25 hours) training sessions in mines employing fewer than 20 workers, and a 30 minute (0.5 hours) training session in mines employing 20 or more workers . The average number of training sessions to be held by a mine, in each mine size category, will be: 77 sessions in mines employing fewer than 20 workers, 262 sessions in mines employing 20 to 500 workers, and 120 sessions in mines employing more than 500 workers.

Table 29 shows annual burden hours and costs for supervisors to give miner health training.

**Table 29
Section 57.5070 Mine Supervisors Perform
Health Training Sessions
Annual Burden Hours and Costs**

Mine Size Emp.	Number of Training Sessions	Health Training (hrs.)	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	77	0.25	19	\$44.79	\$862
20 to 500	262	0.50	131	\$44.79	\$5,867
> 500	120	0.50	60	\$44.79	\$2,687
Total	459		210		\$9,417

**Section 57.5070 - Clerical Worker Prepare Registration Sheet for Health Training Sessions
(Annual Burden Hours and Costs)**

For each mine, the clerical worker will need 10 minutes (0.167 hours) to prepare the Registration sheet for the health training attendees to sign at each training session. As noted earlier the average number of training sessions to be held by a mine, in each mine size category, will be: 77 sessions in mines employing fewer than 20 workers, 262 sessions in mines employing 20 to 500 workers, and 120 sessions in mines employing more than 500 workers.

Table 30 shows annual burden hours and costs for clerical workers to prepare registration sheets for health training sessions.

Table 30
Section 57.5070 Clerical Workers Prepare Registration
Sheet for Health Training Sessions
Annual Burden Hours and Costs

Mine Size Emp.	Number of Training Sessions	Prepare Registration Sheet (hrs.)	Annual Burden Hours	Clerical Worker Wage (per hr.)	Annual Burden Cost
< 20	77	0.167	13	\$17.57	\$225
20 to 500	262	0.167	44	\$17.57	\$767
> 500	120	0.167	20	\$17.57	\$351
Total	459		77		\$1,344

Section 57.5070 - Clerical Workers Record Names of Health Training Attendees in Computer File (Annual Burden Hours and Costs)

For each person trained the clerical worker will record their name in a computer file. It is estimated to take the clerical work 1 minute (0.017 hours) to record each name. The number of trainees are estimated to be: 770 trainees in mines employing fewer than 20 workers, 6,772 trainees in mines employing 20 to 500 workers, and 3,972 in mines employing more than 500 workers.

Table 31 shows annual burden hours and costs for clerical workers to record names of trainees.

Table 31
Section 57.5070 Clerical Workers Record Names
of Health Training Attendees in Computer File
Annual Burden Hours and Costs

Mine Size Emp.	Number of Attendees	Entering Name (hrs.)	Annual Burden Hours	Clerical Worker Wage (per hr.)	Annual Burden Cost
< 20	770	0.017	13	\$17.57	\$225
20 to 500	6772	0.017	113	\$17.57	\$1,983
> 500	3972	0.017	66	\$17.57	\$1,163
Total	11,514		192		\$3,372

Section 57.5070 - Miners Sign Health Training Attendance Sheet (Annual Burden Hours and Costs)

Each miner attending a health training session will be required to sign the registration sheet prepared by the clerical worker. Each signature will require 20 seconds of a miner's time. Table 32 presents the annual burden hours and costs, by mine size, resulting from this provision.

Table 32
Section 57.5070 Miners Sign Health Training
Attendance Sheet
Annual Burden Hours and Costs

Mine Size Emp.	Number of Miners	Sign Name (hrs.)	Annual Burden Hours	Miner Wage (per hr.)	Annual Burden Cost
< 20	770	0.006	4	\$19.42	\$83
20 to 500	6,772	0.006	38	\$19.42	\$731
> 500	3,972	0.006	22	\$19.42	\$429
Total	11,514		64		\$1,242

Section 57.5071 - Mine Supervisor Oral Notification of Sampling (Annual Burden Hours and Costs)

Section 57.5071 requires that mine operators sample the air four times a year to determine DPM concentrations. Additionally mine operators must notify miners and their representatives of the dates and times the sampling will take place. MSHA assumes that 45 percent of mines will notify miners orally. This action will require 2 minutes of a mine supervisor's time. The annual burden hours and costs of oral notification appear in Table 33.

Table 33
Section 57.5071 Mine Supervisor Oral Notification of Sampling
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Number of Oral Notifications per Mine	Oral Notification (hrs.)	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	35	4	0.033	5	\$44.79	\$209
20 to 500	51	4	0.033	7	\$44.79	\$305
> 500	3	4	0.033	0	\$44.79	\$18
Total	89			12		\$532

Section 57.5071 - Written Notification of Sampling (Annual Burden Hours and Costs)

MSHA assumes that another 35 percent of mines will notify miners and their representatives in writing. This will require five minutes of a mine supervisor's time to brief a clerical worker. These annual burden hours and costs appear in Table 34. The clerical worker will prepare, copy and deliver the written notice to each miner. This activity will take five minutes for each miner. The annual burden hours and costs associate with these actions are shown in Table 35.

Table 34
Section 57.5071 Mine Supervisor Written Notification of Sampling
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Number of Written Notifications per Mine	Written Notification (hrs.)	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	27	4	0.083	9	\$44.79	\$403
20 to 500	39	4	0.083	13	\$44.79	\$582
> 500	3	4	0.083	1	\$44.79	\$45
Total	69			23		\$1,030

Table 35
Section 57.5071 Clerical Worker Prepares
Written Notification of Sampling
Annual Burden Hours and Costs

Mine Size Emp.	Number of Miners	Number of Written Notifications per Mine	Written Notification (hrs.)	Annual Burden Hours	Clerical Worker Wage (per hr.)	Annual Burden Cost
< 20	270	4	0.083	90	\$17.57	\$1,581
20 to 500	390	4	0.083	130	\$17.57	\$2,284
> 500	30	4	0.083	10	\$17.57	\$176
Total	690			230		\$4,041

Section 57.5071 - Posted Notification of Sampling (Annual Burden Hours and Costs)

MSHA assumes that the remaining 20 percent of mines will use a posted notice to inform miners of the dates and times that they intend to conduct sampling. This will require five minutes of a supervisor's time to brief a clerical worker. These annual burden hours and costs are exhibited in Table 36. It will take the clerical worker ten minutes to prepare and post the notice and five minutes to be briefed by the supervisor. Table 37 presents these annual burden hours and costs.

Table 36
Section 57.5071 Mine Supervisor Briefs Clerical Worker Regarding
Posted Notification of Sampling
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Number of Posted Notifications per Mine	Briefing Clerical Worker (hrs.)	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	15	4	0.083	5	\$44.79	\$224
20 to 500	22	4	0.083	7	\$44.79	\$328
> 500	1	4	0.083	0	\$44.79	\$15
Total	38			13		\$567

Table 37
Section 57.5071 Clerical Workers Receive Briefing and Prepare
and Post Notification of Sampling
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Number of Posted Notifications per Mine	Briefing Clerical Worker (hrs.) ^a	Annual Burden Hours	Clerical Wage (per hr.)	Annual Burden Cost
< 20	15	4	0.25	15	\$17.57	\$264
20 to 500	22	4	0.25	22	\$17.57	\$387
> 500	1	4	0.25	1	\$17.57	\$18
Total	38			38		\$668

^a 0.25 = 0.083 (to be briefed) + 0.167 (to prepare and post)

Section 57.5071 Mine Supervisor Prepares and Posts Notice of Corrective Action Annual Burden Hours and Costs

If a mine environment is above the DPM concentration limits mine operators will have to take corrective actions. This section requires the mine supervisor to write up and post a notice of the corrective action taken. This will take 15 minutes of the mine supervisor's time. These annual burden hours and costs are displayed in Table 38. MSHA assumes that 20 percent of mines with fewer than 20 workers and 40 percent of larger mines will require corrective action.

Table 38
Section 57.5071 Mine Supervisor Prepares and Posts
Notice of Corrective Action
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Prepare and Post Notice (hrs.)	Annual Burden Hours	Superv. Wage (per hr.)	Annual Burden Cost
< 20	15	0.250	4	\$44.79	\$168
20 to 500	45	0.250	11	\$44.79	\$504
> 500	3	0.250	1	\$44.79	\$34
Total	63		16		\$705

Section 57.5071 Diesel Particulate Sampling by M/NM Mines

Annual Burden Hours and Costs

All 77 mines that employ fewer than 20 workers are assumed to contract out their diesel particulate sampling responsibilities. With respect to the 112 mines that employ 20 to 500 workers 50 percent (or 56 mines) will conduct their own sampling. With respect to the 7 mines that employ more than 500 workers 57 percent (or 4 mines) will conduct their own sampling. For mines employing more than 20 workers, sampling will occur 4 times per year. Each time sampling occurs there will be 2 areas sampled per mine and in each areas 3 samples will be taken. It will take a miner, earning \$19.42 per hour, 20 minutes (0.3333 hrs.) to perform one sample.

Table 39 shows burden hours and related costs to operators that perform their own sampling.

56x4x2x3

Table 39
Section 57.5071 Sampling by Operators
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Number of Samples Annually per Mine ^a	Time to Take a Sample (hrs.)	Annual Burden Hours	Miner Wage (per hr.)	Annual Burden Cost
< 20	0	0	0	0	\$19.42	\$0
20 to 500	56	24	0.3333	448	\$19.42	\$8,700
> 500	4	24	0.3333	32	\$19.42	\$621
Total	60			480		\$9,322

^a 24 = 3 samples per area samples x 2 areas sampled per mine
x 4 sample times per year.

**Section 57.5071 Posting Sampling Results
Annual Burden Hours and Costs**

Once sampling results are received, MSHA estimates that it will take a clerical worker 10 minutes to make two copies of a one-page notice and to post one and deliver the other to the miner's representative. These annual burden hours and costs appear in Table 40.

**Table 40
Section 57.5071 Clerical Worker Copies and Distributes
Sampling Results
Annual Burden Hours and Costs**

Mine Size Emp.	Number of Mines	Number of Samplings per Mine	Copy and Distribute (hrs.)	Annual Burden Hours	Clerical Worker Wage (per hr.)	Annual Burden Cost
< 20	77	4	0.167	51	\$17.57	\$902
20 to 500	112	4	0.167	75	\$17.57	\$1,312
> 500	7	4	0.167	5	\$17.57	\$82
Total	196			131		\$2,296

Section 57.5075

Clerical Workers Respond to Requests for Health Records by Miners Annual Burden Hours and Costs

MSHA assumes that some miners leaving their jobs at the mine or retired miners would request a copy of the health records generated by the requirements of this rule. These records would consist of copies of the exposure measurements that M/NM mine operators are required to maintain. MSHA estimates that 10 percent of miners will request health records each year. It will take a clerical worker five minutes to respond to each request. The annual burden hours and costs resulting from requests for health records appear in Table 41.

Table 41
57.5075 Clerical Workers Respond to Requests for
Health Records by Miners
Annual Burden Hours and Costs

Mine Size Emp.	Number of Mines	Number of Requests per Mine	Respond to Request (hrs.)	Annual Burden Hours	Clerical Worker Wage (per hr.)	Annual Burden Cost
< 20	77	1	0.083	6	\$17.57	\$113
20 to 500	112	6	0.083	56	\$17.57	\$984
> 500	7	56	0.083	33	\$17.57	\$574
Total	196			95		\$1,671

Section 57.5075**Clerical Workers Respond to Requests for Health Records by Dept. of Health and Human Services (DHHS)****Annual Burden Hours and Costs**

Upon request from an authorized representative of the U.S. Department of Health and Human Services (DHHS), underground M/NM mine operators must provide access to any health records. Annually, MSHA estimates that DHHS will request a copy of sampling results from 10 percent of the mines. Therefore, the number of requests each year will be: 8 requests in mines employing fewer than 20 miners, 11 requests in mines employing 20 to 500 workers; and 1 request in a mine employing more than 500 workers. It is estimated to take a clerical worker 5 minutes (0.083 hours) to respond to each request.

Table 42 shows annual burden hours and costs for clerical workers to respond to requests from DHHS.

Table 42
57.5075 Clerical Workers Respond to Requests for
Health Records by DHHS
Annual Burden Hours and Costs

Mine Size Emp.	Number of Requests per Year	Respond to Request (hrs.)	Annual Burden Hours	Clerical Worker Wage (per hr.)	Annual Burden Cost
< 20	8	0.083	1	\$17.57	\$12
20 to 500	11	0.083	1	\$17.57	\$16
> 500	1	0.083	0	\$17.57	\$1
Total			2		\$29

13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

- !** The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.
- !** If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.
- !** Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

Section 57.5060

Costs to Send Extension Application to MSHA

Some mines will file for an extension application because they are not able to meet the 160_{TC} ? g/m^3 concentration limit. The mines filing an extension application to MSHA are estimated to be: 8 mines employing fewer than 20 workers; 11 mines employing 20 to 500 workers; and 1 mine employing more than 500 workers. On average, the length of an application is estimated to be 10 pages, photocopy costs are \$0.15 per page, and postage is \$0.55 per application. One application is sent to MSHA per mine. These costs are expected to occur only in the fifth year after the rule takes effect, and are therefore multiplied by a net present value factor of 0.172 and an annualization factor of 0.07.

The costs to send an extension application to MSHA are as follows.

Section 57.5060(c)

Costs to Send Extension Application to MSHA

Mine Size (Emp.)	Number of Mines	Copies per Mine	Cost per Copy	Copying Costs ^a	Postage Costs ^b	Total One Time Costs	Discounted Annualized Burden Cost ^c
< 20	8	4	\$1.50	\$48.00	\$4.40	\$52.40	\$2.62
20 to 500	11	4	\$1.50	\$66.00	\$6.05	\$72.05	\$3.60
> 500	1	4	\$1.50	\$6.00	\$0.55	\$6.55	\$0.33
Total	20			\$120.00	\$11.00	\$131.00	\$6.54

^a = 10 pages x \$0.15/page

^b = 1 copy per mine sent to MSHA x \$0.55 postage

^c = Total One Time Costs x 0.71294 x 0.07, where 0.71294 is the discount factor

Section 57.5060(d)**Costs to Send Initial Exemption Plan (EP) and Initial Respiratory Protection Plan (RPP) to MSHA**

Mines will file with MSHA an EP and RPP plan, which sets forth conditions concerning respirator use when in certain areas of the mine the required dpm concentration limits cannot be met. The number of mines filing a plan with MSHA are: 11 mines employing fewer than 20 workers; 112 mines employing 20 to 500 workers; and 7 mines employing more than 500 workers. A plan is estimated to be 10 pages, photocopy costs are \$0.15 per page, and postage is estimated to be \$0.77. The plans must be updated annually.

The annual costs to send EP and RPP plans to MSHA are as follows.

Section 57.5060(d)**Costs to Send EP and RPP Plan to MSHA**

Mine Size (Emp.)	Number of Mines	Copies of EP and RPP per Mine	Cost per Copy^a	Copying Costs	Postage Costs^b	Total Annual Costs
< 20	77	4	\$1.50	\$462	\$59	\$521
20 to 500	112	4	\$1.50	\$672	\$86	\$758
> 500	7	4	\$1.50	\$42	\$5	\$47
Total	196			\$1,176	\$151	\$1,327

^a = 10 pages x \$0.15/page

^b = 1 copy per mine sent to MSHA x \$0.77 postage

Section 57.5060(d)**Cost to Purchase and Maintain Respirators**

Annually, mines employing fewer than 20 workers will purchase 4 respirators, while those employing 20 or more workers will purchase 12 respirators. The cost of a respirator is \$30. Each week the respirator uses one filter costing \$2.

The annual costs to purchase respirators will be as follows.

Section 57.5060(d)**Costs to Purchase and Maintain Respirators**

Mine Size (Emp.)	Number of Mines	Number of Respirators per Mine	Annual Cost per Respirator ^a	Annual Costs
< 20	77	4	\$134	\$41,272
20 to 500	112	12	\$134	\$180,096
> 500	7	12	\$134	\$11,256
Total	196			\$232,624

^a \$134 = \$30 (for the respirator) + (\$2/cartridge/week x 52 weeks)

Section 57.5066(c)**Instructional Costs for Maintenance Training**

Mine operators will contract out maintenance training. Instructional costs for such training are estimated to be \$75 per hour, for each person trained.

The first year costs are estimated to be as follows. The costs are annualized using a factor of 0.07. This annualization rate, as described in the Methodology Section of Chapter IV of the Regulatory Economic Analysis, is derived by amortizing a one-time investment over an infinite period using a 7 percent annual discount rate.

Section 57.5066(c)**Instructional Costs for Maintenance Training**

Mine Size	Number Trainees	Tuition/ Trainee	Total First Year Costs	Annualized First Year Costs^a
X < 20	121	\$75	\$9,075	\$635
20 ≤ X ≤ 500	330	\$75	\$24,750	\$1,733
X > 500	66	\$75	\$4,950	\$347
Total	517		\$38,775	\$2,714

^a = Total first year costs x 0.07, where 0.07 is the annualization rate

Section 57.5071**Annual costs of Sampling for Those Mine that Contract out Their Sampling Responsibilities**

MSHA estimates that the following mines will contract out their dpm sampling responsibilities: 77 mines employing fewer than 20 workers; 56 mines employing 20 to 500 workers; and 3 mines employing 500 or more workers. Mines with fewer than 20 workers will sample 12 times per year, while mines with 20 or more workers will sample 24 times per year. The contract rate to take one sample is estimated at \$75. In addition, it will cost \$33 to analyze each sample.

The annual cost to perform dpm sampling by those mines that contract out their sampling responsibilities will be as follows.

Section 57.5071**Annual Costs of Contracted Sampling**

Mine Size (Emp.)	Number of Mines	Number of Samples per Mine	Cost per Sample ^a	Total Annual Costs
< 20	77	12	\$108	\$99,792
20 to 500	56	24	\$108	\$145,152
> 500	3	24	\$108	\$7,776
Total	136			\$252,720

^a \$108 = \$75 to collect the sample + \$33 to analyze the sample

Section 57.5071

Equipment costs for Those Mines that Perform Their Own Sampling

MSHA estimates that some mines will conduct their own dpm sampling. The mines estimated to conduct their own sampling will be: 56 mines employing 20 to 500 workers, and 4 mines employing more than 500 workers. In order for operators to perform their own dpm sampling 3 sampling instruments, each costing \$650, will be needed per mine. In addition, 1 calibration device per mine, costing \$1,000 each, will be needed.

On average, the equipment is estimated to last 10 years. Therefore, total annual costs determined below are multiplied by a 10 year annualization factor of 0.14233656.

Section 57.5071

Equipment Costs of In House Sampling

Mine Size (Emp.)	Number of Mines	Number of Sampling Instruments per Mine	Unit Cost of Sampling Instrument	Number of Calibration Devices per Mine	Unit Cost of Calibration Device	Equip. Costs ^a	Annualized Costs ^b
< 20	0	3	\$650	1	\$1,000	\$0	\$0
20 to 500	56	3	\$650	1	\$1,000	\$165,200	\$11,564
> 500	4	3	\$650	1	\$1,000	\$11,800	\$826
Total	60					\$177,000	\$12,390

^a = number of mines x [(3 x unit cost of sampling instrument) + (cost of calibration device)]

^b = Total first year costs x 0.07, where 0.07 is the annualization rate

In addition, for mines that perform their own dpm sampling, they will need to pay \$33 to have each sample analyzed. Annually, mines employing fewer than 20 workers will have 12 samples analyzed, while mines employing 20 or more workers will have 24 samples analyzed.

The annual costs related to analyzing dpm samples for operators that conduct their own sampling will be as follows.

Section 57.5071
Annual Costs of In House Sampling

Mine Size (Emp.)	Number of Mines	Number of Samples per Mine	Cost per Sample^a	Total Annual Costs
< 20	0	12	\$53	\$0
20 to 500	56	24	\$53	\$71,232
> 500	4	24	\$53	\$5,088
Total	60			\$76,320

^a \$53 = \$20 for disposable filter cassette + \$33 to analyze sample

Section 57.5075**Annual Costs for Miners Requests of Health Records**

Miners can request health records. Per mine, the annual number of requests are estimated to be: 1 request for a mine employing fewer than 20 workers; 6 requests for a mine employing 20 to 500 workers; and 56 requests for a mine employing more than 500 workers. Each request is estimated to be 4 pages in length, photocopy costs are \$0.15 per page, and postage is \$0.33 per request.

Annual costs by miners related to requesting health records will be as follows.

Section 57.5075**Annual Costs for Miners Requests of Health Records**

Mine Size (Emp.)	Number of Mines	Number of Requests per Mine	Copying Costs per Request^a	Postage per Request	Total Annual Costs
< 20	77	1	\$0.60	\$0.33	\$72
20 to 500	112	6	\$0.60	\$0.33	\$625
> 500	7	56	\$0.60	\$0.33	\$365
Total	196				\$1,061

^a \$0.60 = 4 pages x \$0.15/page

In addition, the Department of Health and Human Services (DHHS) can request health records. Annually, the number of such requests are estimated to be: 8 requests for all the mines that employ fewer than 20 workers; 11 requests for all that mines that employ between 20 and 500 workers; and 1 request for all the mines that employ more than 500 workers. Each request is estimated to be 4 pages in length, photocopy costs are \$0.15 per page, and postage is \$0.33 per request.

Annual costs by the DHHS related to requesting health records will be as follows.

Section 57.5075

Annual Costs for DHHS Requests for Health Records

Mine Size (Emp.)	Number of Requests per Year	Copying Costs per Request^a	Postage Costs per Request	Total Annual Costs
< 20	8	\$0.60	\$0.33	\$7
20 to 500	11	\$0.60	\$0.33	\$10
> 500	1	\$0.60	\$0.33	\$1
Total	20			\$19

^a **\$0.60 = 4 pages x \$0.15/page**

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 in a single table.

MSHA would need to print up approximately 10,000 training cards that its inspectors will distribute when they go to an underground metal and nonmetal mine, that uses diesel powered equipment (the card will be provided for informational purposes only - and is not an information collection requirement under the PRA 95 requirements). The training cards will aid in notifying affected miners of the hazards of diesel particulate. The printing of such cards are estimated to cost no more than \$1,500.

MSHA inspectors will take samples to measure dpm in M/NM mines using diesel powered equipment once a year. On average, an inspector, earning about \$25 per hour, will perform the sampling. On average, the time to take each sample will be 9 hours in a mine that employs fewer than 20 workers, and 10 hours in a mine that employs 20 or more workers. Five samples are estimated to be taken in each working area. Seventy-seven (77) mines employing fewer than 20 workers are estimated to have, on average, 1 working area, while 126 mines employing 20 or more workers are estimated to have, on average, 2 working areas. The annual costs to take samples will be as follows:

Annual Costs for MSHA Inspectors to Take DPM Samples

Mine Size (Emp.)	No. of Mines	Time to Take One Sample (hrs.)	Average No. of Working Areas to Sample	No. of Samples Taken per Working Area	Inspector Wage Rate (hr.)	Annual Costs to Sample
<20	77	9	1	5	\$25	\$86,625
≥20	126	10	2	5	\$25	\$315,000
Total						\$401,625

When each sample is taken a filter is needed costing about \$35. The costs for filters are as follows:

Annual Costs for Filters for Sampling Related to DPM

Mine Size (Emp.)	No. of Mines	Average No. of Working Areas to Sample	No. of Samples Taken per Working Area	Cost of Filter per sample	Annual Costs For Filters
<20	77	1	5	\$35	\$13,475
≥20	126	2	5	\$35	\$44,100
Total					\$57,575

In order to analyze the samples MSHA will need to purchase two thermo-optical carbon analyzers, costing \$25,000 each. The costs for equipment is as follows:

$$\$25,000 \times 2 \text{ instruments} = \$50,000$$

It will cost MSHA \$40 to analyze each sample. The cost to analyze the samples are as follows.

Annual Costs for MSHA to Analyze Samples

Mine Size (Emp.)	No. of Mines	Average No. of Working Areas to Sample	No. of Samples Taken per Working Area	Cost to Analyze Each sample	Annual Costs For Filters
<20	77	1	5	\$40	\$15,400
≥20	126	2	5	\$40	\$50,400
Total					\$65,800

15. Explain the reasons for any program changes or adjustments reporting in Items 13 or 14 of the OMB Form 83-I.

This is a new final rule and new collection which will increase the paperwork budget by 6,047 hours and \$781,000.

16. For collections of information whose results will be published, outline plans for tabulation, and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

MSHA does not intend to publish the results of this information collection.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

There are no forms associated with this information collection; therefore, MSHA is not seeking approval to not display the expiration date for OMB approval of this information collection.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submission," of OMB 83-I.

There are no exceptions requested to the certification statement identified in Item 19 of OMB 83-I.

B. Collection of Information Employment Statistical Methods

This collection of information does not employ statistical methods.